

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

FEB 2 5 2019

REPLY TO THE ATTENTION OF

<u>CERTIFIED MAIL</u> RETURN RECEIPT REQUESTED

Joe Winch
Environmental Manager
Didion Milling, Inc.
501 S. Williams St.
Cambria, Wisconsin 53923

Re: Notice and Finding of Violation

Didion Milling, Inc. Cambria, Wisconsin

Dear Mr. Winch:

The U.S. Environmental Protection Agency is issuing the enclosed Notice and Finding of Violation (NOV/FOV) to Didion Milling, Inc. ("Didion") under Sections 113(a)(1) and (3) of the Clean Air Act, 42 U.S.C. §§ 7413(a)(1) and (3). We find that you have violated the Clean Air Act ("the Act") and certain associated federal and state pollution control regulations.

Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the NOV/FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the NOV/FOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Gregory Gehrig. You may call him at (312) 886-4434 or email him at gehrig.greg@epa.gov to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

Edward Nam

Director

Air and Radiation Division

Enclosure

cc: Maria Hill, WDNR

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:)
Didion Milling-Cambria) NOTICE OF VIOLATION and
Cambria, Wisconsin) FINDING OF VIOLATION
)) EPA-5-19-WI-02
Proceedings Pursuant to)
the Clean Air Act)
42 U.S.C.§ § 7401 et sea.	

NOTICE AND FINDING OF VIOLATION

Didion Milling, Inc. ("Didion") owns and operates an ethanol manufacturing facility at 501 S. Williams St., Cambria, Wisconsin ("facility"). At the facility, Didion manufactures denatured ethanol and both wet and dried distillers grains.

The U.S. Environmental Protection Agency (EPA) is sending this Notice of Violation and Finding of Violation (NOV/FOV or "Notice") to notify you that we have found violations of conditions specified in the Wisconsin State Implementation Plan ("Wisconsin SIP"); the New Source Performance Standards (NSPS) at 40 C.F.R. Part 60 Subpart VVa, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction or Modification Commenced After November 7, 2006; and the National Emission Standards for Hazardous Air Pollutants (NESHAP) at 40 C.F.R. Part 63, Subpart FFFF, Miscellaneous Organic Chemical Manufacturing.

Statutory and Regulatory Background

This NOV/FOV is based on the following statutory and regulatory provisions:

Clean Air Act

1. The Clean Air Act ("Act") is designed to protect and enhance the quality of the nation's air so as to promote the public health and welfare and the productive capacity of its population. Section 101(b)(1) of the Act, 42 U.S.C. § 7401(b)(1).

Wisconsin State Implementation Plan (Wisconsin SIP) and Permit Conditions

- 2. In 1995, EPA delegated to the Wisconsin Department of Natural Resources (WDNR) the authority to issue federally-enforceable operating permits under Title V of the Act, 42 U.S.C. §§ 7661 et seq., as part of the Wisconsin SIP (See 60 Fed. Reg. 3543, Jan. 18, 1995 and 40 C.F.R. Part 70). The Wisconsin Title V permitting process is codified in Wisconsin Administrative Code (WAC) NR 406 Construction Permits and NR 407 Operation Permits.
- 3. On January 6, 2014, the WDNR issued Construction Permit No. 13-DCF-144 to Didion ("2014 Permit"), pursuant to NR 406.
- 4. On April 3, 2018, WDNR issued Part 70 Operation Permit No. 111081520-P01 ("2018 Permit"), pursuant to NR 407.
- 5. The 2018 Permit conditions I.A.1.b.(1) and I.A.1.b.(2)(b) and the 2014 Permit condition I.A.1.b.(1)(a) require emissions of volatile organic compounds (VOCs) from the fermentation process to be directed to an ethanol recovery system (e.g., scrubbers) followed by a regenerative thermal oxidizer (RTO).
- 6. The 2018 Permit condition I.A.3.b(1) and the 2014 Permit condition I.A.3.b.(1) require emissions of acetaldehyde to be directed to an ethanol recovery system (e.g., scrubbers) followed by a RTO.
- 7. The 2018 Permit condition I.ZZZ.3(a)(2) and the 2014 Permit condition I.ZZZ.3(a)(2) require air pollution control equipment be operated and maintained in conformance with good engineering practices to minimize the possibility for the exceedance of any emission limitations.

Section 111 of the Act, New Source Performance Standards

- 8. Section 111(b) of the Act, 42 U.S.C. § 7411(b), requires EPA to publish a list of categories of stationary sources and, within a year after the inclusion of a category of stationary sources in the list, to publish proposed regulations establishing federal standards of performance for new sources within the source category. These performance standards are known as the NSPS. EPA codified these standards at 40 C.F.R. Part 60.
- 9. Section 111(e) of the Act, 42 U.S.C. § 7411(e), prohibits the operation of a new source in violation of any applicable standard of performance.

NSPS Subpart VVa. Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction or Modification Commenced After November 7, 2006.

10. NSPS Subpart VVa applies to affected facilities in the synthetic chemical manufacturing industry. Didion operates an NSPS Subpart VVa affected facility, including the closed-vent system routing emissions to a flare from ethanol loadout operations. 40 C.F.R. § 60.480a, 2014 Permit Condition I.H', and 2018 Permit Condition III.A.1.

- 11. NSPS Subpart VVa at 40 C.F.R. §60.485a(b)(1)(ii) requires the leak detection instrument to be calibrated with a mixture of methane or n-hexane and air at a concentration no more than 2,000 ppm greater than the leak definition concentration of the equipment monitored.
- 12. NSPS Subpart VVa at 40 C.F.R. § 60.482-2a(a)(2) states that each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.
- 13. NSPS Subpart VVa at 40 C.F.R. § 60.482-10a(d) states that flares used to comply with NSPS Subpart VVa shall comply with the requirements of 40 C.F.R. § 60.18, of the General Provisions, NSPS Subpart A.
- 14. NSPS Subpart A at 40 C.F.R. § 60.18(c)(1) states that flares shall be designed for and operated with no visible emissions (VE) except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

Section 112 of the Act, National Emission Standards for Hazardous Air Pollutants

- 15. Section 112 of the Act, 42 U.S.C. § 7412, requires EPA to promulgate a list of all categories and subcategories of new and existing "major sources" and "area sources" of hazardous air pollutants (HAPs) and establish emissions standards for the categories and subcategories. These emission standards are known as the NESHAP. EPA codified these standards at 40 C.F.R. Parts 61 and 63.
- 16. "Major source" is defined as "any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants." 42 U.S.C. § 7412(a)(1).
- 17. "Stationary source" is defined as "any building, structure, facility, or installation, which emits or may emit any air pollutant." 42 U.S.C. § 7411(a)(3).
- 18. "Hazardous air pollutant" is defined as "any air pollutant listed in or pursuant to" Section 112(b) of the Act. 42 U.S.C. § 7412(a)(6).
- 19. Section 112(i)(3) of the Act, 42 U.S.C. § 7412(i)(3), prohibits any person subject to a NESHAP from operating a source in violation of a NESHAP after its effective date. See also 40 C.F.R. §§ 61.05 and 63.4.

NESHAP Subpart FFFF. Miscellaneous Organic Chemical Manufacturing

20. NESHAP Subpart FFFF at 40 C.F.R. § 63.2435 states that "you are subject to the requirements in this subpart if you own or operate miscellaneous organic chemical

manufacturing process units (MCPU) that are located at, or are part of, a major source of HAPs emissions as defined in section 112(a) of the [Act]."

- 21. NESHAP Subpart FFFF at 40 C.F.R. § 63.2540 and Table 12 to Subpart FFFF detail the general provisions found in 40 C.F.R. § 63 Subpart A applicable to facilities subject to Subpart FFFF, including but not limited to Startup, Shutdown and Maintenance (SSM) Plan requirements in 40 C.F.R. § 63.6(e).
- 22. NESHAP Subpart FFFF at 40 C.F.R. § 63.2515(b) requires subject facilities to submit an Initial Notification as specified in 40 C.F.R. § 63.9(b)(2).
- 23. NESHAP Subpart FFFF at 40 C.F.R. § 63.2515(c) requires subject facilities to submit a Notification of a Performance Test(s) as required in 40 C.F.R. § 63.7.
- 24. NESHAP Subpart FFFF at 40 C.F.R. § 2520(d) requires subject facilities to submit a Notification of Compliance Status consistent with Subpart FFFF NESHAP Table 11.
- 25. NESHAP Subpart FFFF at 40 C.F.R. § 2520(e) requires subject facilities to submit a Compliance Report consistent with Subpart FFFF NESHAP Table 11.
- 26. NESHAP Subpart FFFF at 40 C.F.R. § 63.2450(a) requires subject facilities to comply with the emission limits and work practice standards listed in Tables 1-10 of Subpart FFFF NESHAP for the following emission units:
 - a. Continuous process vents;
 - b. Batch process vents;
 - c. Storage tanks;
 - d. Transfer racks;
 - e. Equipment leaks;
 - f. Waste water streams and liquid streams in open systems; and
 - g. Heat exchangers.

Findings

- 27. EPA conducted an on-site inspection of Didion on June 28, 2018. Didion provided information to EPA during the inspection and subsequent to the inspection via electronic correspondence. This information included Didion's malfunction prevention and abatement plan, as well as information about Didion's fermentation process, loadout flare, and leak detection and repair program since January 1, 2016.
- 28. During the June 28, 2018 inspection, EPA observed visible emissions from the loadout flare continuously for more than 5 minutes.
- 29. The inspection conducted by EPA using an optical gas imaging (OGI) camera as well as audio, visual and olfactory (AVO) observations revealed uncaptured emissions from the fermentation process from the top of the Didion's fermenters and beer well.

- 30. Emissions calculations performed by EPA in accordance with the Handbook of Chemical Hazard Analysis Procedures (FEMA, USDOT, USEPA, 1989) and based on information provided to EPA by Didion show that uncaptured emissions of acetaldehyde from the fermentation process identified in paragraph 29 are approximately 13 tons per year.
- 31. The facility is a major source of a single HAP, acetaldehyde, and is subject to regulation under NESHAP Subpart FFFF.

Alleged Violations

Permit Conditions

- 32. From at least January 6, 2014, to the date of this Notice, Didion has failed to vent all emissions from the fermentation process to the ethanol recovery system, in violation of 2018 Permit conditions I.A.1.b.(1) and I.A.1.b.(2)(b) and 2014 Permit condition I.A.1.b.(1)(a).
- 33. Since January 6, 2014, Didion has failed to address visible emissions of the loadout flare in accordance with manufacturer's recommendations, in violation of 2014 Permit Condition I.ZZZ.3(a)(2) and 2018 Permit Condition I.ZZZ.3(a)(2).
- 34. Since January 6, 2014, Didion has failed to maintain components on top of its fermenters and beer well that are part of the fermentation process that have the capacity to vent fermentation emissions uncontrolled directly to the atmosphere. This is a failure to operate air pollution control equipment in conformance with good engineering practices, in violation of 2014 Permit Condition I.ZZZ.3(a)(2) and 2018 Permit Condition I.ZZZ.3(a)(2).

NSPS Subpart VVa. Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction or Modification Commenced After November 7, 2006.

- 35. Since January 6, 2014, Didion has violated the VE limit for the loadout flare, per 40 C.F.R. § 60.18(c)(1) whenever the facility has loaded out E85 for more than 5 minutes in any consecutive two-hour period, including during the EPA inspection on June 28, 2018.
- 36. Since January 1, 2016, Didion has failed to conduct weekly pump checks regularly in violation of 40 C.F.R. § 60.482-2a(a)(2).

NESHAP Subpart FFFF. Miscellaneous Organic Chemical Manufacturing

- 37. Since January 6, 2014, Didion has failed to develop a SSM plan, in violation of 40 C.F.R. § 63.6(e)(3).
- 38. Since January 6, 2014, the facility has failed to submit an Initial Notification, in violation of 40 C.F.R. § 63.2515(b).

- 39. Since January 6, 2014, the facility has failed to submit a Notification of a Performance Test(s), in violation of 40 C.F.R. § 63.2515(c).
- 40. Since January 6, 2014, the facility has failed to submit a Notification of Compliance Status, in violation of 40 C.F.R. § 63.2520(d) and Subpart FFFF NESHAP Table 11.
- 41. Since January 6, 2014, the facility has failed to submit a Compliance Report, in violation of 40 C.F.R. § 63.2520(b)(2), 63.2520(e), and Subpart FFFF NESHAP Table 11.
- 42. Since January 6, 2014, the facility has failed to comply with the emission limits and work practice standards listed in Tables 1-10 of Subpart FFFF NESHAP, in violation of 40 C.F.R. § 63.2450(a) for the following emission units:
 - a. Continuous process vents;
 - b. Batch process vents;
 - c. Storage tanks;
 - d. Transfer racks:
 - e. Equipment leaks;
 - f. Waste water streams and liquid streams in open systems; and
 - g. Heat exchangers.

Environmental Impact of Violations

- 43. Violations cited above tend to result in elevated emissions of particulate matter, VOCs and HAPs, particularly acetaldehyde.
 - a. Acute exposure to acetaldehyde leads to irritation of the eyes, skin, and respiratory tract, as well as erythema, coughing, pulmonary edema, and necrosis. Chronic exposure to high levels of acetaldehyde has been linked to effects similar to alcoholism, slight anima, as well as nasal, trachea, and kidney pathology. EPA lists acetaldehyde as a probable human carcinogen.
 - b. VOCs contribute to ground level ozone, which can irritate the human respiratory system and reduce lung function.
 - c. Particulate matter, especially fine particulate matter, can irritate the human respiratory system, reduce lung function, negatively affect the cardiopulmonary system and is a known to aggravate asthma and other respiratory illnesses.

2/25/19 Date 1

Edward Nam

Director

Air and Radiation Division

CERTIFICATE OF MAILING

I, Kathy Jones, certify that I sent a Notice and Finding of Violation, No. EPA-5-19-WI-02, by Certified Mail, Return Receipt Requested, to:

Joe Winch Environmental Manager Didion Milling, Inc. 501 S Williams St Cambria, Wisconsin 53923

I also certify that I sent copies of the Notice of Violation and Finding of Violation via email to:

Maria Hill, Chief
Compliance, Enforcement, and Emission
Inventory Section
Air Management Program
Environmental Protection Division
Wisconsin Department of Natural Resources
Maria.Hill@wisconsin.gov

Barbara Pavliscak, Supervisor Air Management South Central Region Wisconsin Department of Natural Resources Barbara.Pavliscak@wisconsin.gov

On the 27th day of February 2019

Kathy Jones

Program Technician

AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: 7017 6536 0000 6289 2259